

U.S. Serial No. 10/648,916  
Reply to Office Action Dated 3/30/06

Docket No. 1232-5125

**REMARKS**

Applicants respectfully request reconsideration of the above-identified application in view of the foregoing amendments and following remarks.

**The March 30, 2006 Office Action was Prematurely Made Final.**

Applicants respectfully traverse the finality of the rejection of Office action dated March 30, 2006. The first Office action for this application, i.e., the Office action dated Sep. 27, 2005 did not include a single rejection based upon prior art. That Office action merely instituted a restriction requirement, objected to the drawings and rejected various claims under 35 U.S.C. § 112, 2nd paragraph for indefiniteness. Moreover, that Office action did not even cite a single reference as pertinent to the application! Applicants responded to the Sep. 27, 2005 Office action on Dec. 27, 2005. The March 30, 2006 Office action, which responds to Applicant's Dec. 25 response, includes art rejections for the first time, and each such rejection relies on newly cited references, i.e., *references that were never of record prior to the March 30 Office action*. Applicants submit that in light of these facts, the March 30 Office action should not have been made final. Applicants respectfully request reconsideration and withdrawal of the finality of the rejection of that Office action.

**All Withdrawn Claims Have Been Canceled.**

The Office action dated March 30, 2006 withdrew claims 3, 5, 16, 17, 20, and 24-27 from consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species and/or invention. By this paper, each one of these claims has been

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canceled. Applicants expressly reserve the right to pursue these claims in one or more divisional applications.

**All of the Pending Claims are Definite.**

The March 30, 2006 Office action rejected claims 1, 2, 4, 6–15, 18, 19, and 21–23 under 35 U.S.C. § 112, 2nd paragraph as allegedly being indefinite. In particular, the Office action asserted that the recitation of “the same layer” in the last line of the then-pending versions of claims 1 and 23 lacked sufficient antecedent basis. Additionally, the Office action asserted that the phrase “a semiconductor layer” thinner than “said semiconductor layer” in the then-pending version of claim 2 lacked sufficient antecedent basis and was unclear to the extent that it recited that a layer thinner than itself. Additionally, the Office action asserted that the phrase “the second electrode” in the then-pending version of claim 14 lacked sufficient antecedent basis. Claims 4, 6–13, 15, 18, 19, 21, and 22 were included in the rejection solely because of their dependency of claim 1.

Applicants respectfully traverse this rejection. Claims 1 and 23 currently recite, *inter alia*, that “each of” the first semiconductor conversion element and the second semiconductor conversion element “has a semiconductor layer which has originally been formed on a common layer on the substrate.” Applicants respectfully submit that each limitation in this recitation has sufficient antecedent basis. Additionally, claim 2 currently recites that the switch element has a semiconductor layer thinner than “said semiconductor layer of said first semiconductor conversion element and said semiconductor layer of said second semiconductor conversion element.” Applicants

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respectfully submit that each limitation in this recitation has sufficient antecedent basis. Additionally, claim 14 currently recites that the second semiconductor conversion element has a structure of a field effect transistor which uses "a second electrode" as one of the source and drain electrodes. Applicants respectfully submit that the limitation "a second electrode" in claim 14 has sufficient antecedent basis.

The March 30, 2006 Office action states that claims 4 and 12-15 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, 2nd paragraph, set forth in the Office action and to include all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for indicating allowable subject matter. Claim 12 is currently independent and complies with 35 U.S.C. § 112, 2nd paragraph. Therefore claim 12 is allowable. Additionally, claim 13, which depends from claim 12, is allowable at least for the same reason that claim 12 is allowable.

**Claims 1, 2, 6, 8-11, 18-19, 21-22 and 23 are Not Obvious in Light of Garland, Kaifu, and Okumura et al.**

The Office action dated March 30, 2006 admitted that claims 1, 2, 6, 8-11, 18-19, 21-22 and 23 were novel over the prior art, but rejected these claims under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,198,800 to Garland et al. ("Garland") in view of U.S. Patent No. 6,075,256 to Kaifu et al. ("Kaifu"). The Office action also rejected claim 7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Garland and Kaifu as applied above and further in view of U.S. Patent

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Application Publication No. 2002/0054659 A1 to Okumura et al. ("Okumura").

Applicants respectfully traverse these rejections.

Claim 1 currently recites, *inter alia*, that "said second semiconductor conversion element has a structure of a field effect transistor." The Office action specifically mentioned this feature as a reason why claim 4 was allowable in substance: "Regarding dependent claims 4 and 14–15, although *Garland* in view of *Kaifu* suggest first and second conversion elements, they do not disclose or fairly suggest that the second element has the structure of a FET." 3/30/06 Office Action at p. 7. Claim 23 also recites this feature, except that "said second semiconductor conversion element" is replaced by "said second photoconductive element" to conform to the language used earlier in the claim. Therefore, independent claims 1 and 23 are allowable. Because claims 2, 6–11, 14, 15, 18, 19, 21, and 22 each depend, either directly or indirectly, on claim 1, these claims are also allowable.

**New Claims 28–32 Are Allowable.**

By this paper, new claims 28–32 are added. Each of these claims is drawn to the elected apparatus invention and is either generic as to the asserted species of that invention or is drawn to the elected species, i.e., the embodiment shown in Figs. 1–3. Independent claim 28 recites, *inter alia*, "a first pixel which includes said first photoconductive element and said second photoconductive element." The March 30, 2006 Office action cited this feature as a reason why claim 12 was allowable in substance (with the caveat that this limitation in claim 12 recites "said second semiconductor conversion element" instead of "said second photoconductive element"). Therefore claim

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28 is allowable. Claims 29 and 30 depend from claim 28 and are therefore allowable at least for the same reason that claim 28 is allowable. Claim 31 depends from independent claim 12 and is therefore allowable at least for the same reason that claim 12 is allowable. Claim 32 depends from independent claim 23 and is therefore allowable for at least the same reason that claim 23 is allowable.

Finally, Applicants have not specifically addressed the rejections of the dependent claims. Applicants respectfully submit that the independent claims, from which they depend, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicants, however, reserve the right to address such rejections of the dependent claims in the future as appropriate.

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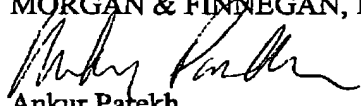
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### CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is requested. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-5125.

Dated: June 30, 2006

Respectfully submitted,  
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